TransPort®WR44v2

Wireless Routers

Installation Guide

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Safety Notices

1. Please read all instructions before installing and powering the unit. You should keep these instructions in a safe place for future reference.

2. If the power supply shows signs of damage or malfunction, stop using it immediately, turn off the power and disconnect the power supply before contacting your supplier for a repair or replacement.

3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Use only the accessories, attachments, and power supplies provided by the manufacturer – connecting non-approved antennas or power supplies may damage the unit, cause interference or create an electric shock hazard, and will void the warranty.

4. Do not attempt to repair the product. The unit contains no electronic components that can be serviced or replaced by the user. Any attempt to service or repair the unit by the user will void the product warranty.

5. Products in the TransPort WR® family are designed for indoor use (except for the WR44 R) and should be used in an environment that is suitable for computers and other electronic equipment.

6. Ports that are capable of connecting to other apparatus are defined as SELV ports. To ensure conformity with IEC60950 ensure that these ports are only connected to ports of the same type on other apparatus.

Special notes on safety for wireless routers

Digi International products are designed to the highest standards of safety and international standards compliance for the markets in which they are sold. However, cellular-based products contain radio devices which require specific consideration. Please take the time to read and understand the following guidance. Digi International assumes no liability for an end user's failure to comply with these precautions.

Wireless routers incorporate a wireless radio module. Users should ensure that the antenna(s) is (are) positioned at least 1 meter away from themselves and other persons in normal operation.

When in a hospital or other health care facility, observe the restrictions on the use of mobile phones. Do not use the unit in areas where guidelines posted in sensitive areas instruct users to switch off mobile phones. Medical equipment may be sensitive to RF energy.

The operation of cardiac pacemakers, other implanted medical equipment and hearing aids can be affected by interference from cellular terminals such as the wireless routers when places close to the device. If in doubt about potential danger, contact the physician or the manufacturer of the device to verify that the equipment is properly shielded. Pacemaker patients are advised to keep the wireless router away from the pacemaker while it is on.

Wireless routers must NOT be operated on aircraft. The operation of wireless appliances in an aircraft is forbidden to prevent interference with communications systems. Failure to observe these instructions may lead to the suspension or denial of cellular services to the offender, legal action, or both.

As with any electrical equipment, do not operate the unit in the presence of flammable gases, fumes or potentially explosive atmospheres. Radio devices should not be used anywhere that blasting operations are taking place.

Wireless routers receive and transmit radio frequency energy when power is on. Interference can occur if used close to TV sets, radios, computers or inadequately shielded equipment. Follow any special regulations and always power off your unit wherever forbidden or when it may cause interference or danger.

SOS IMPORTANT! - Wireless routers operate using radio signals and cellular networks cannot be guaranteed to connect in all possible conditions. Therefore, never rely solely upon any wireless device for life critical communications.
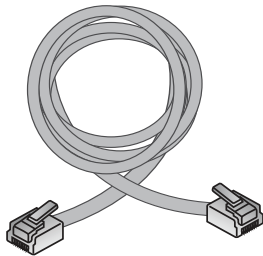
Table of Contents
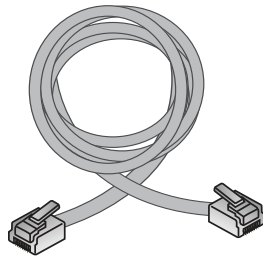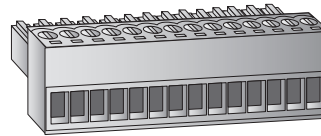
1 Package Contents
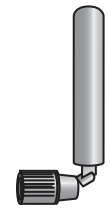
TransPort WR44

Installation Guide

Ethernet Cable

PSTN Cable
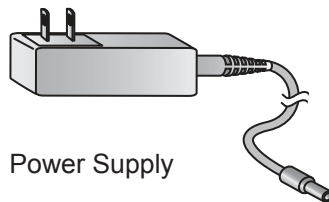[PSTN & DialServ models only]

Telemetry Connector
[Telemetry models only]

Cellular
Antenna(s)

Power Supply Adapters
[Non-US models only]

Power Supply

(some models may include a DC Power
Cord or have no Power Supply)

GPS Antenna
[GPS models only]
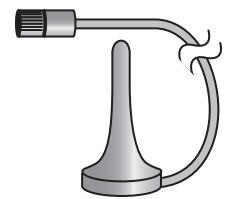
Wi-Fi Antenna
[Wi-Fi models only]
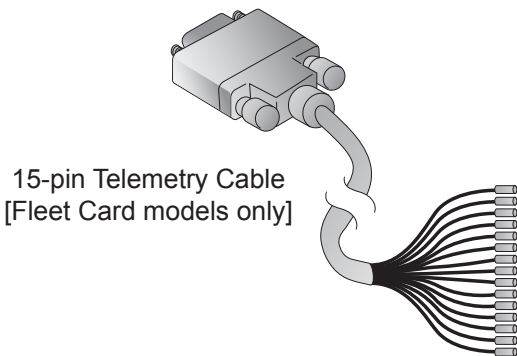
15-pin Telemetry Cable
[Fleet Card models only]
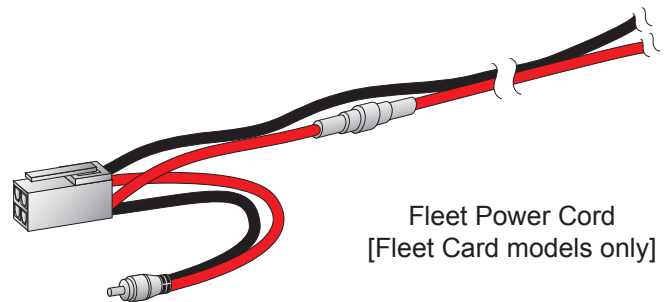
Fleet Power Cord
[Fleet Card models only]

If any item is missing or damaged, please contact your supplier. Also, make a record of any damage that may have occurred during shipping and report it to the carrier.

Depending on model and configuration, the package will also contain additional cables/antennas as appropriate.

Preface

This guide describes the installation procedure for the TransPort WR family of routers. It is intended to provide sufficient information to be able to connect the unit to terminal equipment and power-on the unit. A complete reference guide to the software features that are available on the product is available separately in PDF format and can be downloaded from the Digi International web site (*www.digi.com*).

2 Introduction

The Digi TransPort WR family of cellular routers offers an all-in-one mobile communications solution with true enterprise class routing, security and firewall. These multifunction cellular routers feature a flexible design with an optional integrated Wi-Fi access point (with multi SSID) / Client, USB, serial, and Ethernet, as well as a variety of configuration options including multiple serial ports (async or sync), GPS or I/O telemetry modules.

The Digi TransPort family also offers an advanced routing, security and firewall feature set including stateful inspection firewall and integrated VPN. Enterprise class protocols incorporate BGP, OSPF and VRRP+, a patented technology built upon the popular VRRP failover standard providing true auto sensing, auto failure and auto recovery of any line drop.

Digi TransPort WR routers are ideal for transportation and mobile applications. Flexible power options include AC, DC and 4-pin Molex connectors for direct integration into vehicle applications. Also available is the Digi Remote Manager™ which provides easy setup, configuration and maintenance of large installations of Digi TransPort devices.

2.1   Enclosure Features

TransPort WR44
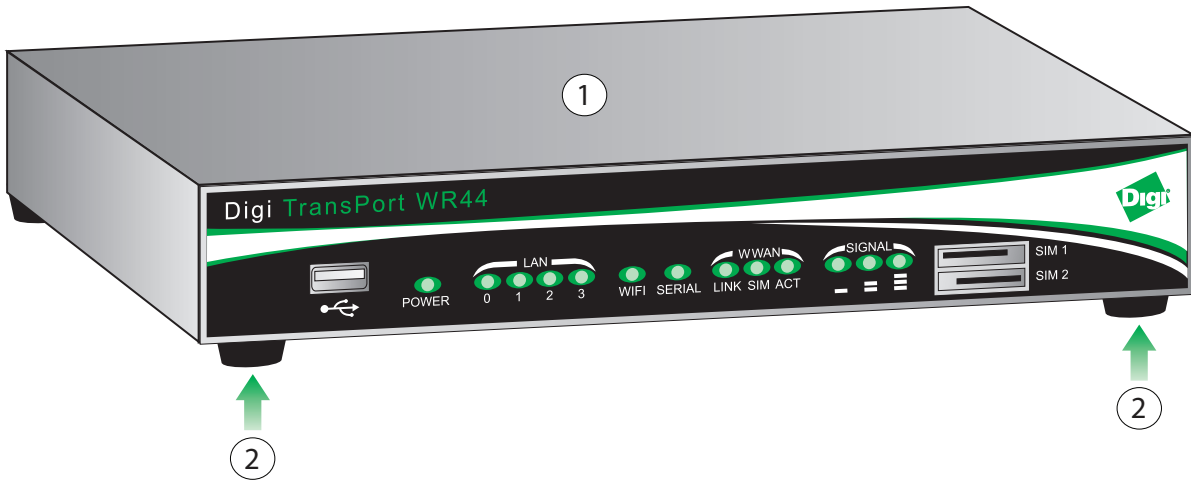
TransPort WR44 R
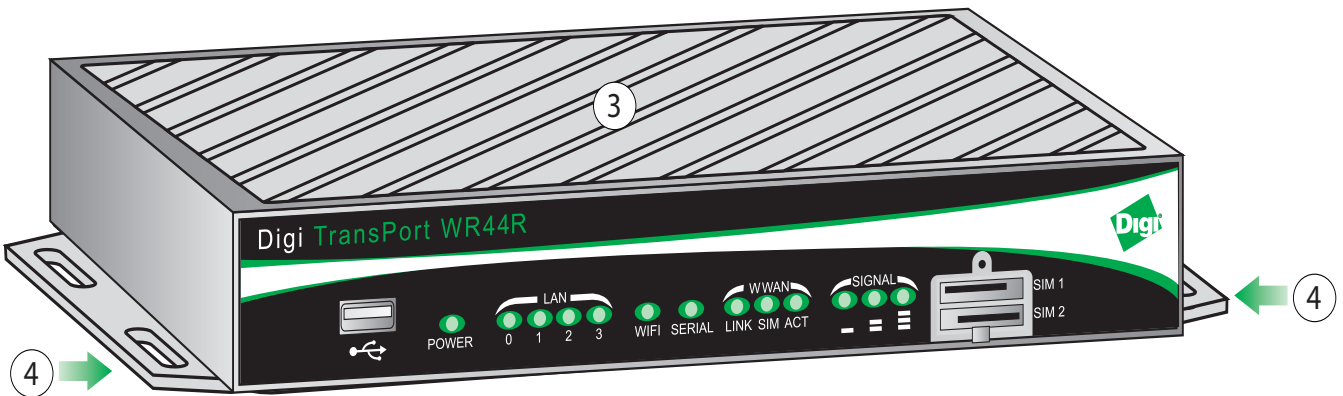
TransPort WR44 DSL Variant
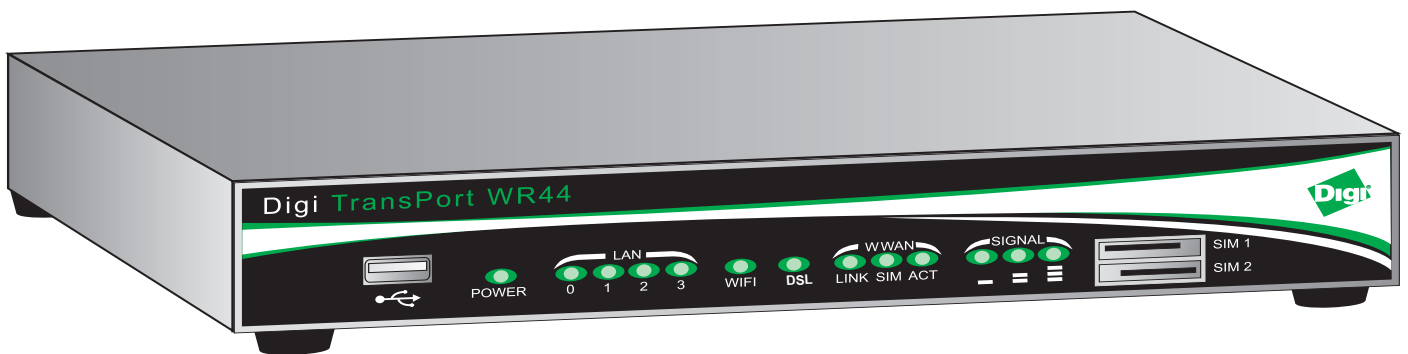
1.   Commercial Enclosure

2.   Mounting Feet

3.   Rugged Enclosure

4.   Mounting Tabs

2.2. Front Panel Features

TransPort WR44 DSL Variant

1. USB Host Connector - The USB host connector may be used to connect compatible USB 2.0 client devices such as memory sticks, and serial adapters. The total current available to power USB devices is 0.5A.

2. LED Status Indicator - POWER - Illuminates steady when power is connected.

3. LED Status Indicator - LAN (0, 1, 2, 3) - Illuminates steady when there is a network connection to the LAN port and flashes when data is transmitted or received.

4. LED Status Indicator - Wi-Fi -Illuminates steady if Wi-Fi activity is present.

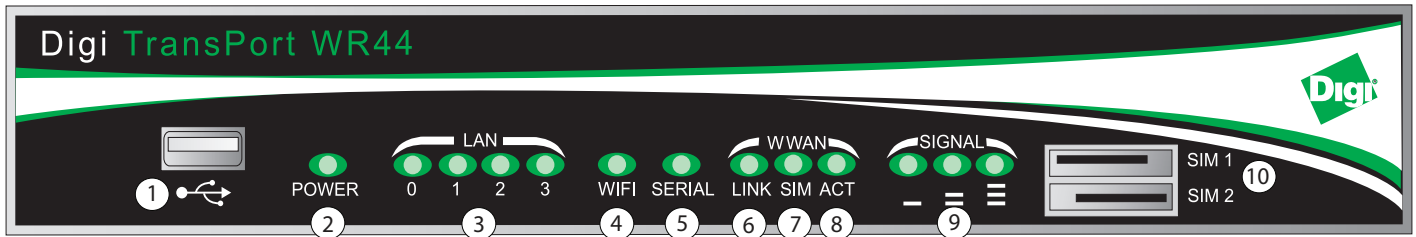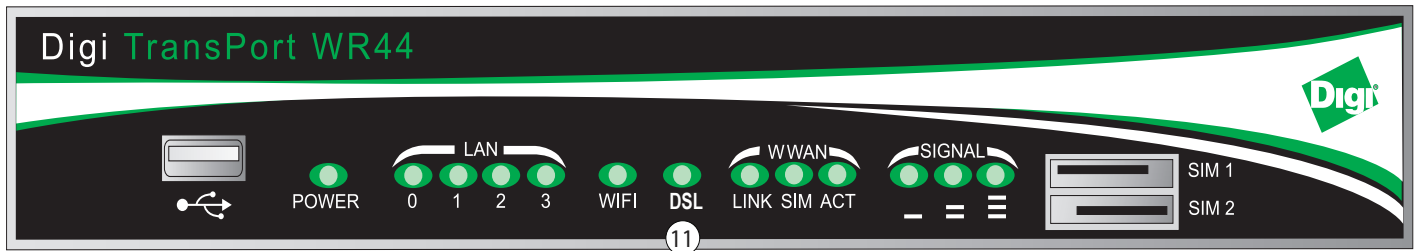5. LED Status Indicator - SERIAL - Illuminates steady if a terminal is connected to the SERIAL 0 port and the DTR signal is on. Flashes when data is transmitted or received.

6. LED Status Indicator - LINK - Illuminates steady when a wireless data connection has been established.

7. LED Status Indicator - SIM - Illuminates steady when a valid SIM card is installed.

8. LED Status Indicator - ACT - Flashes to indicate that data is being transferred over the wireless network.

9. LED Status Indicator - SIGNAL.

    a) WR44 - G, -E and -U models: signal strengths are as follows:

    - 0 LEDs illuminated: < -113 dBm (effectively no signal)
    - 1 LED illuminated: >= -112 dBm and <= -87 dBm (weak)
    - 2 LEDs illuminated: >= -86 dBm and <= -71 dBm (medium)
    - 3 LEDs illuminated: >= -70 dBm and <= -51 dBm (strong)

    b) WR44 - C models: signal strengths are as follows:

    - 0 LEDs illuminated: < -116 dBm (effectively no signal)
    - 1 LED illuminated: >= -115 dBm and <= -104 dBm (weak)
    - 2 LEDs illuminated: >= -103 dBm and <= -94 dBm (medium)
    - 3 LEDs illuminated: >= -93 dBm and <= -83 dBm (strong)

10. SIM / R-UIM Sockets (SIM card models only) - SIM 1 and SIM 2 are for use with the Subscriber Identification Module(s) (SIMs) or Removable User Identification Module(s) (R-UIMs).

11. LED Status Indicator - DSL – (WR44 DSL variant only).

- Constant red - no DSL is detected.
- Flashing red - DSL is detected and unit is trying to train up to the DSL signal.
- Constant green - DSL is active.
- Flashing green - Data is being transferred LED Status Indicator - LINK - Illuminates steady when a wireless data connection has been established.

2.3 Rear Panel Features
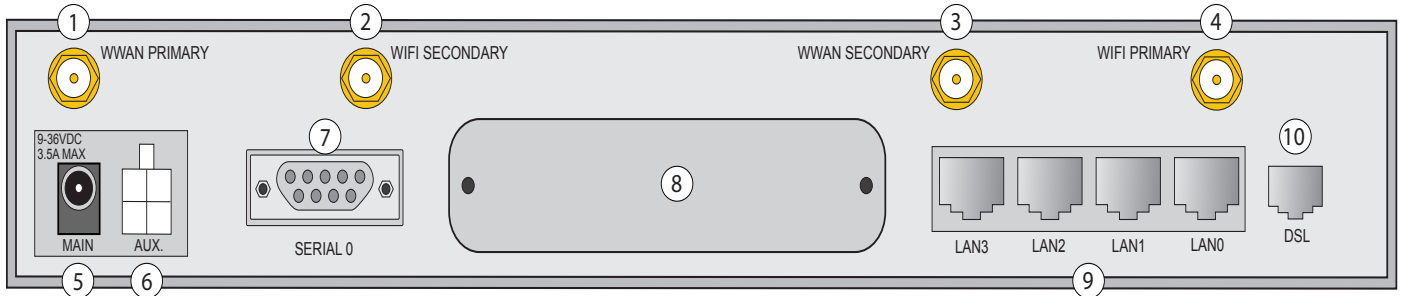
1. Primary Cellular (WWAN) Antenna Connector - This SMA female connector is used to connect the unit's primary cellular antenna.

2. Secondary Wi-Fi (WLAN) Antenna Connector (Wi-Fi models only) - This SMA male connector is used to connect the unit's secondary Wi-Fi antenna.

3. Secondary Cellular (WWAN) Antenna Connector - This SMA female connector is used to connect the unit's secondary cellular antenna. It is highly recommended to use the secondary antenna for diversity. In most circumstances, dual antennas will provide improved signal strength thus better performance.

4. Primary Wi-Fi (WLAN) Antenna Connector (Wi-Fi models only) - This SMA male connector is used to connect the unit's primary Wi-Fi antenna.

5. Power Cord Input - This socket is used to connect the unit to a power source.

Note: The power supply has a twist-lock connector which can be secured by rotating it 90 degrees once installed into the TransPort unit.

6. 9-36VDC (Aux) - This socket can be used to connect the unit to an alternative 9-36VDC power supply (not supplied) using a fused power cable which can be purchased separately. This cable also contains two programmable IO signal lines, one is an input signal, and the other is an input/output signal.

7. SERIAL 0 Port - This DB9 port provides an asynchronous RS232 serial port which may be used to connect the unit to a compatible serial device. This is a DCE serial port and allows CLI access to the device by default; the baud rate is 115200.

8. Hardware Expansion Port - Various hardware upgrades are available for this unit and are populated via this expansion port. See the Additional Hardware Features section on page 12 for further information.

9. LAN Ports - These RJ45 ports are used to connect the unit to a 10/100 base-T LAN. These ports are auto-sensing for speed and wiring (straight-through or cross-over).

10. DSL Port (WR44 DSL variant only) – This RJ11 socket is used to connect the unit to an ASDL/VDSL line.

2.4   Under Unit Features

TransPort WR44

[Front of Unit]

[Rear of Unit]

TransPort WR44 R

[Front of Unit]

[Rear of Unit]
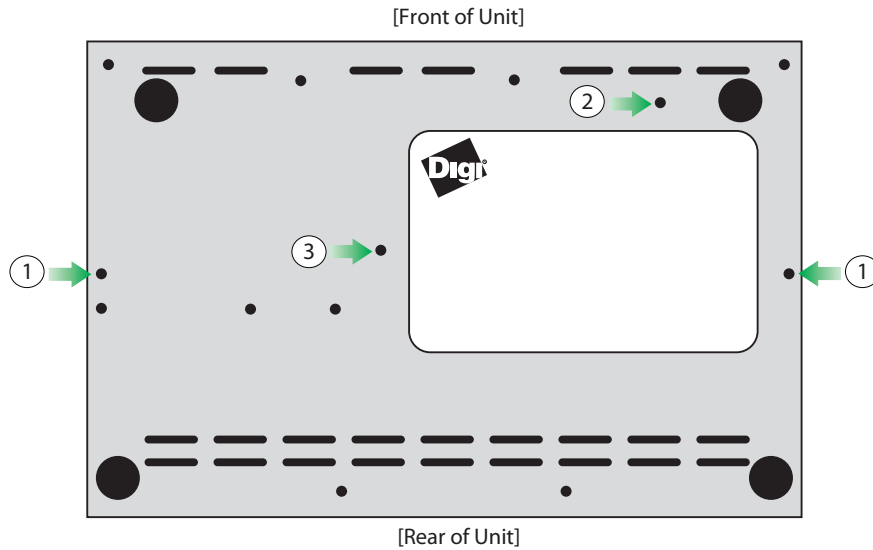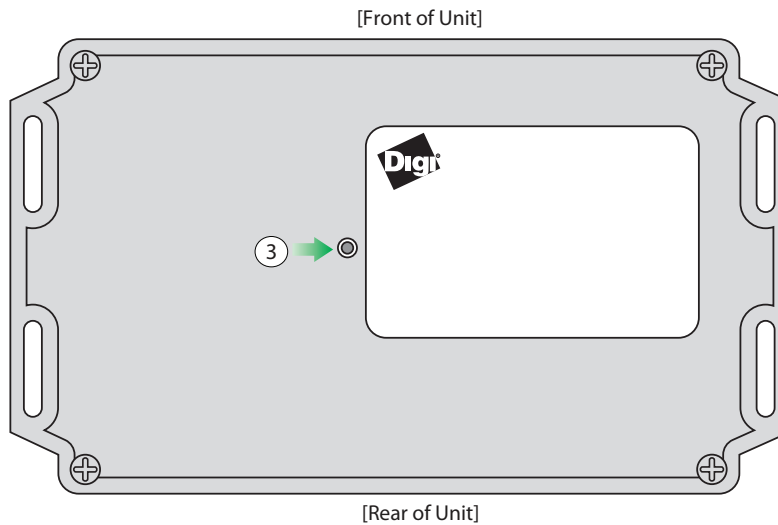
1.   Unit mounting holes.

2.   SIM slot cover plate mounting hole.

3.   Reset button - The reset button allows the user to return the unit to its factory default settings. It is recessed [to avoid accidental reset], and can be accessed via a small 2.5mm hole located on the underside of the unit.

2.4.1   Reset instructions

Step 1) Turn the unit on and wait 15 seconds for the unit to complete its initialization process.

Step 2) Press and hold the reset button gently for 5 seconds. After this time, the unit will automatically re-boot and display a pattern of alternating LEDs flashing followed by the normal boot sequence.

Note: Do not remove power from the unit during this operation as corruption of the flash memory may occur.

2.5   Additional Hardware Features

The TransPort WR44 v2 is available with various hardware options, as shown below:

Option 1: ASY Serial Port (3x)

Option 2: SYN/ASYN Serial Port

Option 3: GPS

Option 4: ISDN

Option 5: Telemetry 1 I/O Interface

Option 6: Telemetry 2 I/O Interface

Option 7: Fleet I/O Interface

Option 8: PSTN

Option 9: ISDN-U/PSTN

Option 10: DialServ
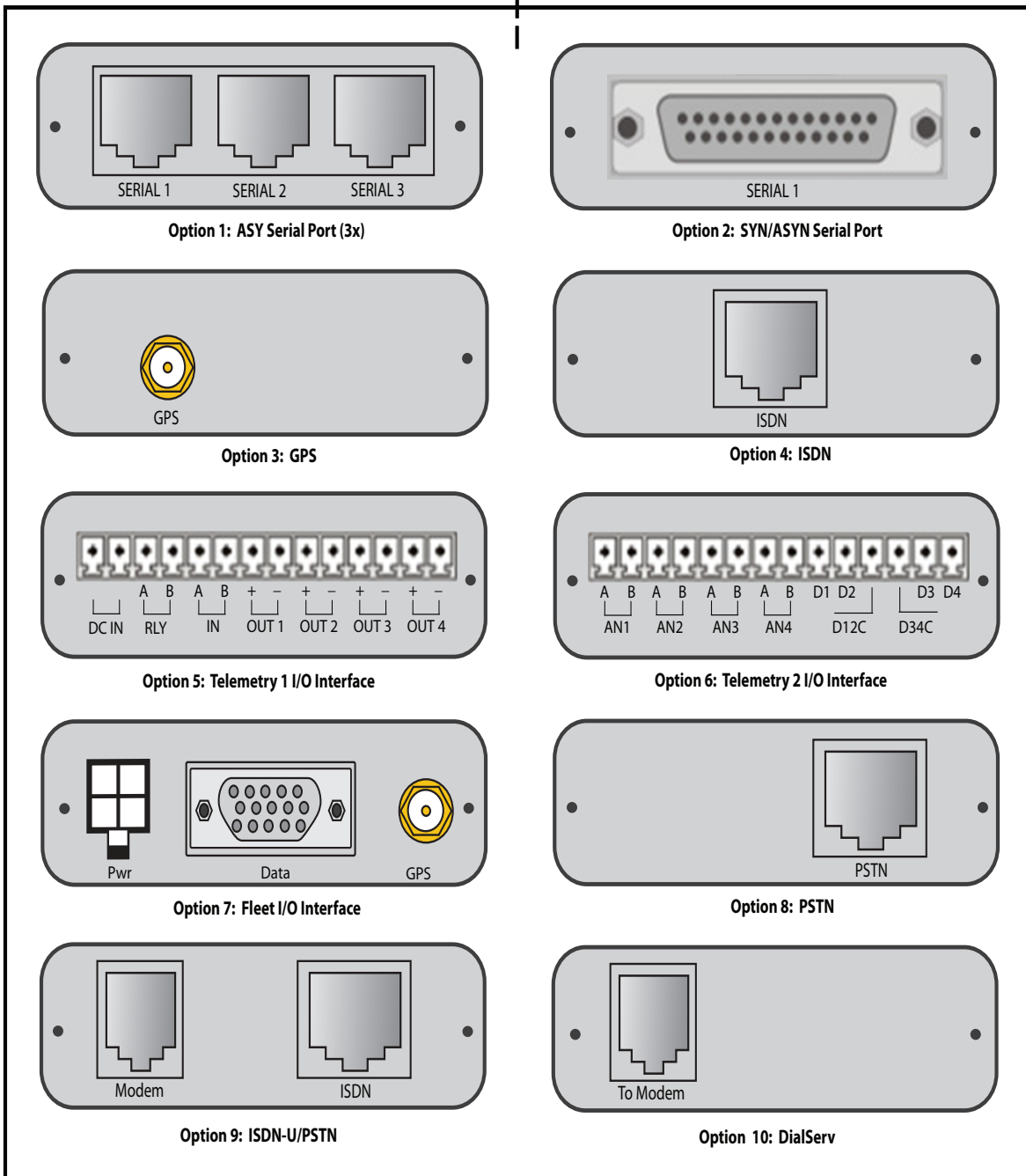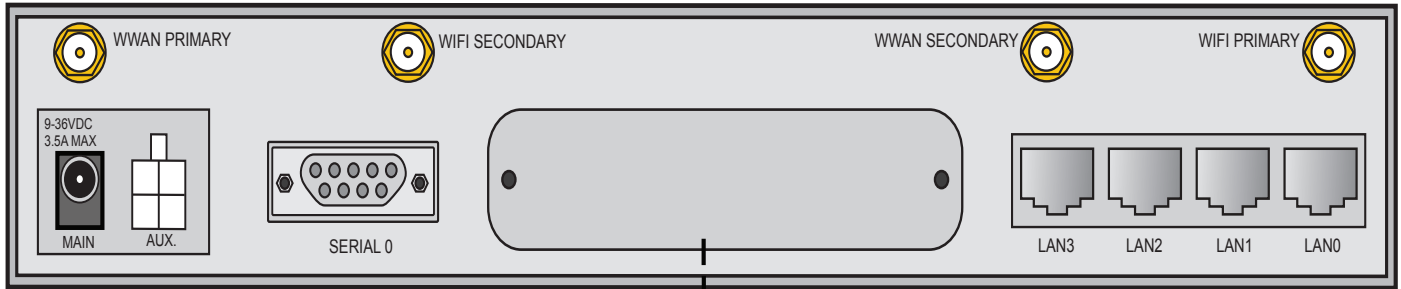
1. ASY Serial Port (3x) - Provides three additional asynchronous RS232 serial ports using RJ45 connectors.

2. SYN/ASYN Serial Port - Provides an X.21/RS422/RS232 synchronous / asynchronous serial port using a DB25 connector.

3. GPS - Provides GPS capabilities using an SMA male connector.

4. ISDN - Provides an ISDN Basic Rate Interface (BRI) via an RJ45 port. This can be configured either as a TE (terminal endpoint) or as NT-1 (network termination). The option also includes an additional asynchronous serial port via a second RJ45 port.

5. Telemetry 1 I/O Interface - Provides 4 opto-isolated digital input ports and 1 opto-isolated digital output port. It also provides a relay I/O port, a voltage monitoring port, and internal temperature monitoring.

6. Telemetry 2 I/O Interface - Provides 4 isolated analog I/O ports and 4 non-isolated digital I/O ports.

7. Fleet I/O Interface - Provides CAN and J1708 interface, GPS, 4 non-isolated digital I/O ports, ignition sense port, and a 3 axis accelerometer.

8. PSTN - Provides a PSTN interface via an RJ45 connector that can be used to dial out and receive calls.

9. ISDN-U/PSTN - Provides an ISDN-U interface suitable for the USA plus PSTN interface. It can be configured for Bell-103 modulation in leased line mode as well as a normal PSTN interface.

10. DialServ - This RJ11/FXS connection converts a PSTN analog modem to a RS-232 serial signal.

For more information on the Telemetry 1, Telemetry 2, and the Fleet I/O Interfaces please see the product specific user's guides which can be found at: *http://ftp1.digi.com/support/documentation/transport/technicalnotes.htm*

3 Installation

Mounting Tips

The TransPort WR44 should be positioned on a flat, level surface or via a wall-mount, rackmount, or DIN rail mounting brackets (see the Accessories section on page 23 for all options). The unit is designed for indoor use (except for the WR44 R) and should be mounted in a location with adequate ventilation. Also, do not expose the unit to extremes of heat or cold, strong magnetic fields, or liquids.

[Front of Unit]

SIM 1
SIM 2

1

Digi TransPort WR44

SIM 1
SIM 2

[Rear of Unit]

3

2

6

4
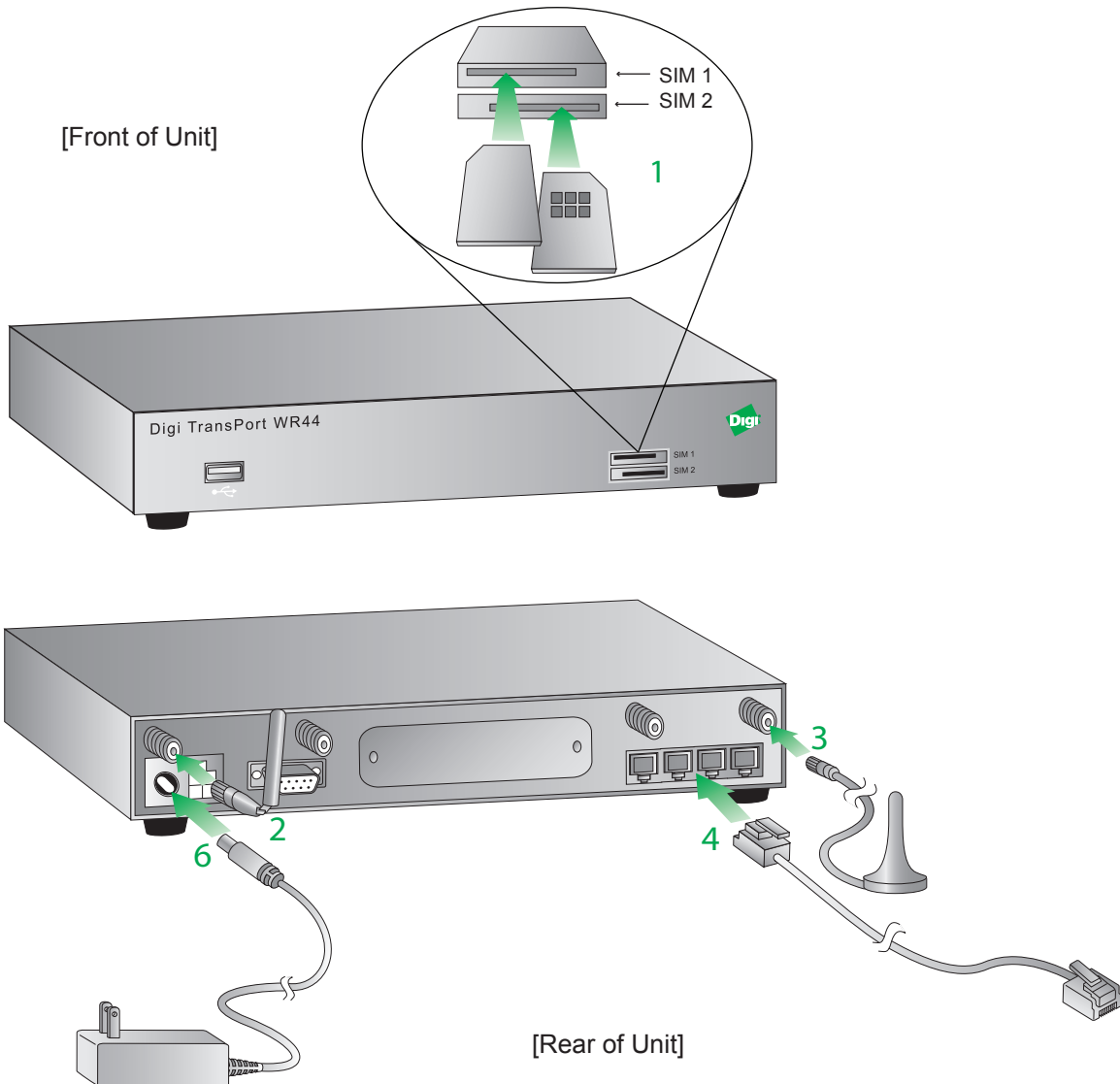
Step 1) (SIM card models only) - Install the SIM card(s): SIM card(s) should be inserted into SIM Sockets as illustrated in the above Front View image. For SIM 1, the contacts should be face down. For SIM 2, the contacts should be face up. In both cases, the end of the SIM card with the chamfered corner should be inserted first.

Note: For WR44-C models, not all networks require/support the use of Removable User Identity Modules (R-UIM's). If your service provider does not support R-UIMS, the unit may have been "provisioned" for use on your chosen network before you receive it and this step of the installation procedure will not be required. If the unit has not been provisioned, you will need to contact your service provider to obtain an "IMSI" and "NAI" in order to provision the unit manually.

The TransPort WR44 also allows for dual network installations where one wireless service can be used as a back-up in the event that the primary service fails. These installations cannot be used to access two networks simultaneously. By default, SIM 1 is used for access to the primary network and SIM 2 is used for the back-up network.

For added security, Digi offers a "SIM Slot Cover Plate" that can be installed on the unit to deter theft or tampering of the SIM cards, (see the Accessories section on page 23 for more information).

Step 2) Connect the Cellular (WWAN) Antenna(s): Connect the cellular antenna to the "WWAN PRIMARY" connector (SMA Female) on the unit. If the unit is equipped with a secondary cellular antenna connector (WWAN SECONDARY), it is highly recommended to connect an additional antenna to this connector for diversification. Dual antennas will provide improved signal strength thus better performance.

Note: For most applications, the antenna(s) included with the unit will provide suitable reception, but some circumstances/environments may require a higher quality antenna or one mounted in a different location. If this is the case, Digi has many antenna options to chose from -- please contact us or visit www.digi.com. If antennas other than the supplied antenna(s) are used, the separation between the two should be no less than five inches (5").

Step 3) (Wi-Fi models only) – Connect the Wi-Fi Antennas: Connect the Wi-Fi antennas to the 'WIFI PRIMARY and WIFI SECONDARY' antenna connectors (SMA Male).

Step 4) Connect the LAN Cable: Connect one end of the Ethernet cable to the "LAN" port on the unit and the other end to a LAN port on a PC.

Step 5) Connect the Serial Cable (optional): Connect one end of the serial cable (not included) to the "SERIAL 0" port on the unit and other end to the serial port on a third-party serial terminal device. If you wish to connect the unit to a PC, it is recommended that you purchase Digi's serial cable (P/N: 76000858).

Some TransPort models also include additional serial ports which have RJ45 connectors. For those models, Digi offers the following serial cables for connectivity:

- P/N: 76000855 -- RJ45 to DB9 Female - 6'

- P/N: 76000856 -- RJ45 to DB25 Male - 6'

- P/N: 76000857 -- RJ45 to DB25 Female - 6'

Step 6) Connect the Power Supply: Depending on model, the unit will either come with an AC power supply, 4-pin DC power cord, or a Fleet power cord. Instructions for all options are described below.

AC Power Supply - Connect the locking barrel end of the power supply to the "MAIN" connector on the unit, and plug the other end into a wall outlet. "International" units come with interchangeable Power Supply Adapters which can be used according to regional needs.

4-Pin DC Power Cord - Connect the 4-pin molded end of the cord to the "AUX" connector on the unit, and wire the four bare wires accordingly to your needs. The red and black wires provide basic DC power input, and the blue and green wires are programmable signal lines.

WARNING: Only one of the power connectors should be used. Never apply power to both the MAIN and AUX ports at the same time.

Fleet Power Cord - Connect the 4-pin molded connector to the "Pwr" port on the unit. Connect the locking barrel jack to the "MAIN" connector on the unit. Finally, wire the two bare wires accordingly to your needs.

For sample wiring diagrams and pinout information, see the 4-Pin DC Power Cord and Fleet I/O Interface User's Guides, which can be found online at *http://ftp1.digi.com/support/documentation/transport/technicalnotes.htm.*

Step 7) When the unit is powered-up, the POWER indicator will illuminate and the unit will initiate a series of diagnostic self-tests. During this process one or more of the other indicators will flash to show that the unit is busy. When the flashing stops, the unit has completed its self-test diagnostics and is ready to be configured.

4 Configuration

Once the unit has been installed and powered up, it needs to be configured to communicate with the LAN and WAN. Configuration is performed either using the Command Line Interface (CLI) or the Web Interface. The Web Interface (accessed via a web browser e.g. Firefox, IE, Chrome) is the recommended configuration option for most users.

Note: You will not be able to use the unit for remote communication until you have subscribed to a suitable mobile/cellular wireless network service.

4.1 Network Settings

The default IP address for the LAN port is 192.168.1.1 with a subnet mask of 255.255.255.0. The unit has a DHCP server enabled by default which can assign an appropriate IP address to your PC if the PC is configured to get an IP address automatically. Alternatively you can manually configure your PC to be on the 192.168.1.x network, for example, with an IP address of 192.168.1.2 and subnet mask of 255.255.255.0. Care should be taken to ensure that the unit does not conflict with other devices that may already be on the network.

4.2 Web Interface

Step 1) Connect to the Web Interface: Open a Web browser (e.g. Firefox, IE, Chrome) on your PC and navigate to *http://192.168.1.1*. If successful, you will be prompted to enter a username and password. The default username is "username", and the default password is "password". After you have logged in, it is strongly recommended that you immediately change the default username and password.
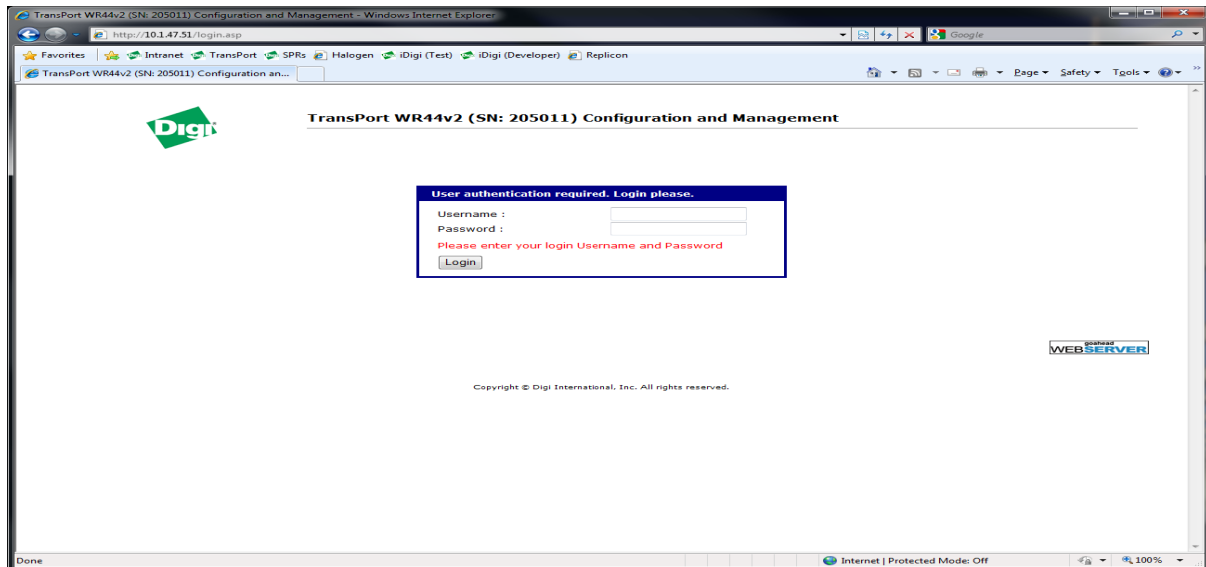
If you are unable to connect to the Web Interface, please refer to the Troubleshooting section on page 21.

Step 2) Configure the Unit: The easiest way to perform the initial configuration of the unit is by using the Quick Start Wizard. This wizard allows you to configure the following items where applicable:

- Username and password

- LAN IP settings

- DHCP Server

- Mobile module and connection

- Wi-Fi Access Point

The Quick Start Wizard is located in the Getting Started section on the Home menu.
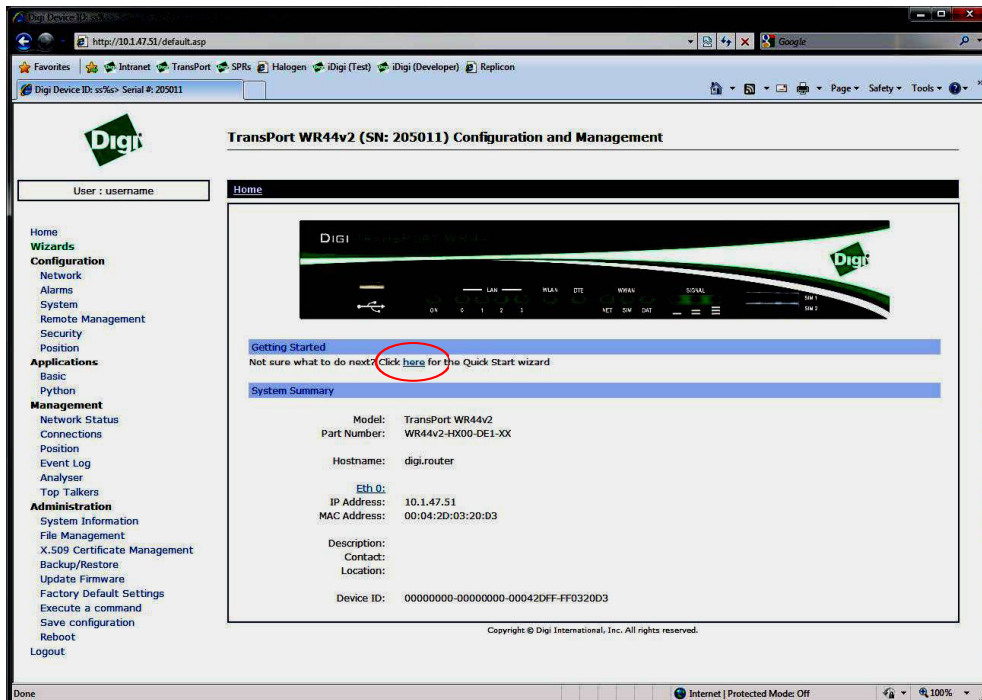
4.2.1   Cellular: CDMA

If your unit is to be used on a CDMA network, the embedded module must be provisioned on the network before it can make a connection.

Note: If your unit uses a Gobi module (indicated by a model number of WR44-U5xx-xxx-xx), and you did not select the appropriate CDMA carrier via the Quick Start Wizard, you must run the GOBI Module Carrier Wizard before provisioning can be successfully completed.

To provision the CDMA mobile device, navigate to the CDMA Provisioning section by clicking on **Network > Mobile > CDMA Provisioning.**
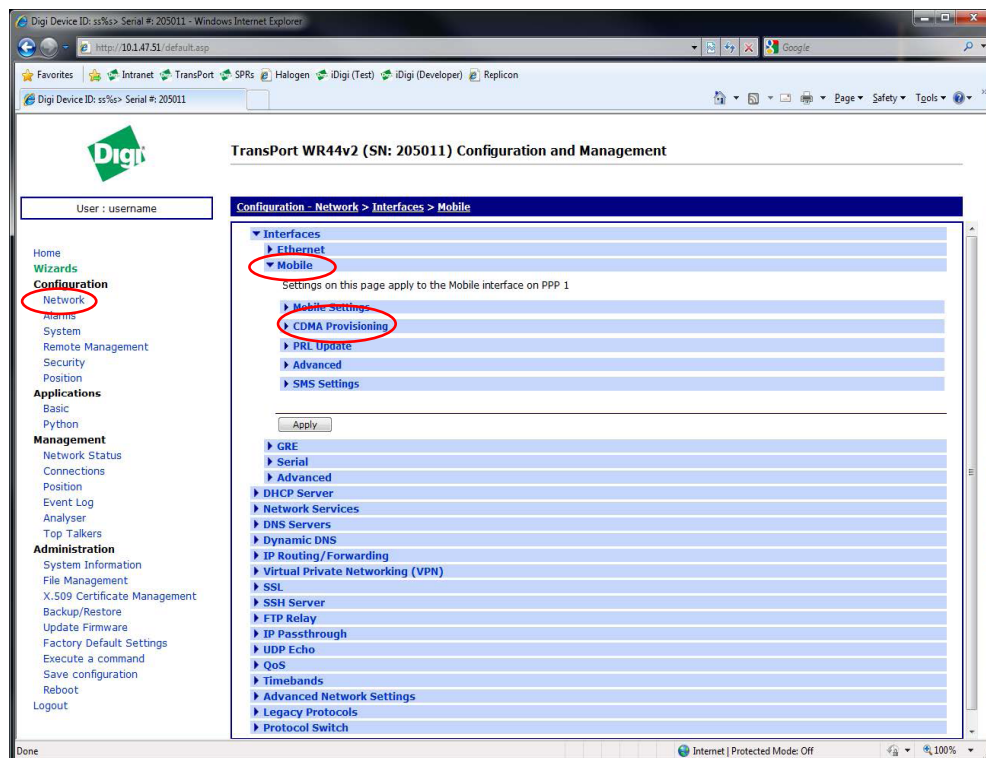
4.2.1.1   CDMA Provisioning

CDMA provisioning is different from GSM since CDMA (in most cases) does not use a SIM card.

The CDMA modem provisioning process creates a CDMA data connection to the mobile carrier network. This authenticates the modem and retrieves account information which is written to flash memory on the modem module itself, not the Digi's configuration file. As the mobile account information is stored on the CDMA module, performing a factory reset on the unit will not remove provisioning information from the CDMA module.

Important points:

- The modem must be provisioned on the network before it will communicate.

- The modem must be in coverage area of the native carrier. It cannot be roaming.

- There must be sufficient signal strength available to provision the modem.

- Always use MIP Profile 1 for manual provisioning unless specified otherwise by your carrier or Digi Technical Support.

4.2.1.2   Automatic vs. Manual Provisioning

There are two types of CDMA provisioning: *Automatic* and *Manual.* This varies between carriers and even within carriers. Settings in the Web Interface vary based on carrier plan. Below are examples for Verizon Wireless and Sprint:

Verizon Wireless always uses *Automatic*. This means that no further settings are required in the Web Interface - simply press Start in the Automatic section and leave the fields blank.

Sprint has two types of plans, Vision for standard Internet connections and DataLink for private IP plans:

1. Sprint Vision uses *Automatic* provisioning. There are three fields of information that may need to be populated in the Automatic screen. Check with Sprint for correct values (if required).

2. Sprint DataLink requires *Manual* provisioning. The required fields in the Web Interface vary based on plan and type of embedded modem. As noted above, always use MIP Profile 1 unless otherwise specified by your carrier or Digi Technical Support.

Check with your carrier for information about the type of provisioning required and what, if any, data is required to be entered.

For more information on configuring the unit, please refer to the Digi TransPort User Guide which is available at *www.digi.com*.

4.2.2   Cellular: GSM

To configure the Wireless WAN/mobile interface on non-CDMA routers (GPRS/UMTS/HSPA), please refer to the Application Guide "QN02 - Configure the wireless WAN (PPP) interface" which can be found on the Digi Support site (*http://www.digi.com/support/*).

It is also essential to configure a dead link detection mechanism for routers using a Wireless WAN/mobile interface (such as GPRS/HSDPA/CDMA). Please refer to the Application Guide "AN07 - Wireless - Wide Area Network (W-WAN) Problem Detection and Recovery" which can also be found on the Digi Support site (*http://www.digi.com/support/*).

4.3   Command Line Interface (CLI)

In order to configure the unit serially, ensure that the unit is connected to a PC (as outlined in Step 5 on page 15 of the Installation section). Also, terminal emulation software (such as HyperTerminal) will be required.

4.3.1   CLI Notes

- To view the current configuration settings, enter the command **CONFIG C SHOW**.

- To save changes made to the unit, enter the command **CONFIG 0 SAVE**.

- All entered commands will take effect immediately.

4.3.2   Communication Settings

Step 1) Configure the following settings for the unit:

COM Port: [select the appropriate port; typically COM1]

Baud Rate: 115200

Data Bits: 8

Stop Bits: 1

Parity: No Parity

Flow Control: None

Step 2) Ensure the connection is active by entering the command **AT**. If the device is functioning properly, it will return the response OK.

Step 3) Ensure the COM port is setup correctly by entering the command **ATI5**.

4.3.3   Network Settings

To configure the unit with an IP address as part of an existing network, use the commands below.

Note: *The DHCP server will still operate unless it is disabled.*

Command	Description
ETH 0 IPADDR *XXX.XXX.XXX.XXX*	Sets the Eth 0 IP address
ETH 0 MASK *XXX.XXX.XXX.XXX*	Sets the Eth 0 subnet mask

As an example, to assign the IP address 192.168.10.254/24, the following commands would be entered:

ETH 0 IPADDR 192.168.10.254

ETH 0 MASK 255.255.255.0

Note: *When setting the mask to the above 255.255.255.0 value, it will not appear in the output of the* **CONFIG C SHOW** *command as it is a default value.*

To stop the DHCP server from serving addresses, use the following command:

Command	Description
DHCP 0 IPMIN *X*	Removes the minimum IP address that will be server via DHCP, disabling the DHCP server

As an example, to stop the DHCP sever from DHCP requests, enter the command **DHCP 0 IPMIN !**. The **!** variable is used to remove a value or set it back to its default.

To retain the DHCP server, but on a different subnet, the following parameters will need to be configured:

Command	Description
DHCP 0 IPMIN x.x.x.x	Minimum IP address to assign, the start of the DHCP pool
DHCP 0 IPRANGE	The number of IP addresses in the DHCP pool
DHCP 0 GATEWAY x.x.x.x	The IP gateway address the DHCP clients should use (normally this router's LAN IP address)
DHCP 0 MASK x.x.x.x	The subnet mask DHCP clients should use
DHCP 0 DNS	The DNS server DHCP clients should use

For more information on CLI commands, visit *http://www.digi.com/support/* and view the various reference manuals available.

5 Troubleshooting

5.1 Troubleshooting Resources

There are several resources available to you for support of your Digi product or resolving configuration difficulties at Digi's Support site, *http://www.digi.com/support/*. Try these troubleshooting steps to eliminate your problem. After working through these steps and your problem is not solved, try the resources listed below.

1. Digi's Support knowledge base: *http://www.digi.com/support/kbase*.

2. Digi TransPort support documents: *http://ftp1.digi.com/support/documentation/transport/technicalnotes.htm*.

3. If the knowledge base or support forums do not have the information you need, submit an Online Support Request via: *http://www.digi.com/support/eservice/login.jsp?p=true*. You will need to create a user account if one is not already set up.

When submitting a support request, please include a copy of the debug.txt file from the unit's flash. This will greatly improve the quality of the initial response you receive. Without this file, it is often very difficult for the support team to provide accurate answers to your queries.

For instructions on how to download the debug.txt file from the unit, view the online document "QN24 - Extracting the debug.txt file from a Digi TransPort or Sarian router".

5.2 Unable to open the Web Interface

Ensure that the LAN cable is properly connected to the LAN port and that the "LAN" status indicator on the front of the unit is illuminated. If it is not, then there is a problem with either the LAN cable or the device it is connecting to. If the status indicator is illuminated, check that the PC can communicate with the unit. To do this, open the Command Prompt window on your PC and enter the command "ping 192.168.1.1". If you do not get a response, then the problem could be one of the following:

- The IP address of the unit has been changed from its default of 192.168.1.1. Use the Digi TransPort Connection Wizard (which can be downloaded from the Support area at Digi.com or the Digi Device Discovery Tool). It can usually discover the unit on a network as long as the unit's firewall has not been enabled.

- PC IP configuration. The PC's LAN interface that is connected to the unit should be configured to "Obtain an IP address automatically". If required, the Digi TransPort Connection Wizard can be used to configure the PC.

- Check the PC's LAN connection and any LAN device (e.g. Ethernet switch) that is used to interconnect to the unit.

- Refresh the PC's IP settings by opening a command window and enter "ipconfig /release" then "ipconfig / renew".

- ARP resolution. Clear the PC's ARP cache with the command "arp –d *", then retry the ping command. If you do get a response but are unable to view the Web Interface, then there is most likely a problem with your web browser configuration.

5.3 Unable to log in to the Web Interface

Access to the unit can be achieved via any of the asynchronous serial ports. Connect your PC to the unit using a "straight through" RS232 serial cable. This will allow you to change the configuration via the Command Line Interface (CLI). Please refer to the Digi TransPort User Guide for information on how to use the CLI. The User Guide can be downloaded from the Digi Support site. If you have further questions about your product please contact Digi Technical Support (see page 2 for contact information).

6 Specifications

Specifications	Digi TransPort WR44 / WR44 R
General Features:	
Dimensions (L x W x H)	5.7" x 8.3" x 1.6" (145 mm x 210 mm x 40 mm) DSL Variant 5.7" x 10.3" x 1.6" (145mm x 262mm x 40mm)
Weight	1.98 lb (0.9Kg) DSL Variant 2.5lb (1.4Kg)
Other	Standard dual SIM (SIM protection cover option); Conformal coating (option)
RF Features:	
GSM Models	
GPRS	GPRS Class 10, Quadband 850/900/1800/1900 MHz
EDGE	GPRS Class 10/EDGE Class 10, Quadband 850/900/1800/1900 MHz
HSDPA/HSUPA/UMTS	850/900/1900/2100 MHz with Rx Diversity
CDMA Models	
CDMA/EV-DO Rev A	Dualband 800/1900 MHz with Rx Diversity; Optional multi-mode GSM/EV-DO Gobi support; 450 MHz, 3.1 Mbps down / 1.8 Mbps up, R-UIM support
Power Requirements:	
Power Input	9-36VDC
Power Supply	100 - 240 VAC 50/60 Hz with barrel connector, Optional Molex connector with bare wire leads
Power Consumption	8 W @ 12 VDC
Environmental:	
Operating Temperature	WR44: 0° C to +60° C WR44 Extended Temp/WR44R: -40° C to +75° C; -20° C to +75° C (Wi-Fi models only) Reduced cellular performance may occur above +60° C
Relative Humidity	20% to 95% (non-condensing)
Ethernet Isolation	1.5 kV
Serial Port Protection (ESD)	1.5 kV
Approvals:	
Mobile Certifications - GSM/UMTS	PTCRB, NAPRD.03, GCF-CC, R&TTE, EN 301 511
Mobile Certifications - CDMA/EV-DO	CDG TIA/EIA-690, CDG TIA/EIA-98-E
Wireless Carrier Certifications	Certified by most major carriers. See *www.digi.com* for current listing.
Safety	UL 60950, CSA 22.2 No. 60950, EN60950
Emissions / Immunity	CE, FCC Part 15 Class B, AS/NZS CISPR 22, EN55022 Class A

7 Accessories

AC Power Supplies

North America (NA)	76000823
International (Intl.)	76000823
NA - Extended Temp.	76000790
Intl. - Extended Temp.	76000789

DC Power Cords

Barrel Plug to Bare Wire	76000807
Barrel Plug to 12V Auto Power Outlet	76000810
4-pin to 12V Auto Power Outlet	76000809
4-pin to Bare Wire	76000808

Mounting Brackets

DIN Rail	76000777
Wallmount	76000778
Rackmount	76000840

Adapters

RJ45 to DB9 Female - 6'	76000855
RJ45 to DB25 Male - 6'	76000856
RJ45 to DB25 Female - 6'	76000857

Cables

RJ45 to RJ45 - 0.5m	76000825
RJ45 to RJ45 - 2m	76000826
RJ45 to RJ45 Crossover - 2m	76000827
RJ45 to RJ45 - 12'	76000828
RJ45 to RJ45 Crossover - 12'	76000829
SMA Male to SMA Female - 5m	76000830
SMA Male to SMA Female - 10m	76000831
SMA Male to SMA Female - 15m	76000832
DB9 Female to DB9 Male - 6'	76000858

SIM Slot Cover Plates

10-pack	76000785
10-pack Starter Kit	76000779
Torx Driver Tool	76000853

Antennas - Cellular

Direct Mount, Quad Band, 2dBi	76002050
Direct Mount, Penta Band, 2dBi	76002052
Direct Mount, Dual Band, 3dBi	DC-ANT-DBDP3
Magnet Mount, Penta Band, 2.5dBi	76002051
Magnet Mount, Dual Band, 4.0dBi	DC-ANT-DBHG
Glass Mount, Quad Band, 1.5dBi	76000844
Glass Mount, Penta Band, 0dBd	76000845
Surface/Marine Mount, Quad Band, 0dBi - 2.15dBi	76000864
Surface/Through-hole Mount, Quad Band, 0dBd	76000846
Surface/Through-hole Mount, Quad Band, 3.15dBi	76000847

Antennas – Cellular/Wi-Fi Combo

Surface/Through-hole Mount, Penta Band / 2450 Band, 0 - 2dBi	76000843

Antennas – Wi-Fi

Direct Mount, 2450/5300Mhz	CPTS-ANT-HG
Table-top Mount, 2450Mhz	DC-ANT-24DT
Direct Mount, 2450Mhz, 7.8dBi	DC-ANT-24DP

Antennas - GPS

Magnet Mount, 1575Mhz, 28db	76000842
Surface/Through-hole Mount, 1575Mhz, 25db	76000841

Antenna Mounting Brackets

L-shaped wallmount, 16.5mm hole	76000850
L-shaped wallmount, 12mm hole Compatibility: 76000843, 76000841	76000851
L-shaped wallmount, 20mm hole Compatibility: 76000847	76000857

Declaration of Conformity

EC Declaration Of Conformity

We,

Manufacturer's Name: Digi International

of

Manufacturer's Address: 11001 Bren Road East
Minnetonka, MN 55343

declare under our sole responsibility that the product:

Product Name: TransPort WR44v2

Model Numbers: Reference product list below

to which this declaration relates are in conformity with the essential requirements and other relevant requirements of the Directive 2004/108/EC (EMC), Directive 2006/95/EC (LVD) and Council Directive 1999/5/EC R&TTE.

EMC: (article 3.1b) EN55022:2006 + A1:2007
EN55024:1998 + A1:2001 + A2:2003
EN61000-3-2:2006 + A1:2009 + A2:2009
EN61000-3-3:2008
EN301489-7:v1.3.1

Safety: (article 3.1a) EN60950-1:2006 + A11:2009

Minnesota, USA, 4 January, 2012
(Place and date of issue)

**Authorised signature for and on
behalf of Digi International Inc.
Joel Young, VP, Engineering**

European
Representative:

Andreas Burghart
Digi International GmbH Branch Breisach
Kueferstr. 8, 79206 Breisach, Germany
Telephone: +49-7667-908-124

EC Declaration Of Conformity

Part Number
WR44-NNHH-ZYY-XX
• Where NN can be: 00, 01, C0, C1, C2, C3, C4, C5, C6, C8, E1, G1, U0, U2, U4, U5, U6, U7, U8
• Where HH can be: 00, A1, A3, F1, G1, I1, I3, P1, P3, S1, T1, T2
• Where Z can be: C, N, F, G, L, M
• Where YY can be: A1, A2, A3, A5, E1, E2, E3, E5, S1, S2, S3, S5, V1, V2, V3 or any numeric value
• Where AA can be: SA, SB, SD, SF, SL, SN, SU, SW, RA, RB, XA, XB, XD, XF, XH, XG, XJ, XK

Product Disposal Instructions

The WEEE (Waste Electrical and Electronic Equipment: 2002/96/EC) directive has been introduced to ensure that electrical/ electronic products are recycled using the best available recovery techniques to minimize the impact on the environment.

This product contains high quality materials and components which can be recycled. At the end of its life this product MUST NOT be mixed with other commercial waste for disposal. Check with the terms and conditions of your supplier for disposal information.

Digi International Ltd WEEE Registration number: WEE/HF1515VU

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Digi International

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